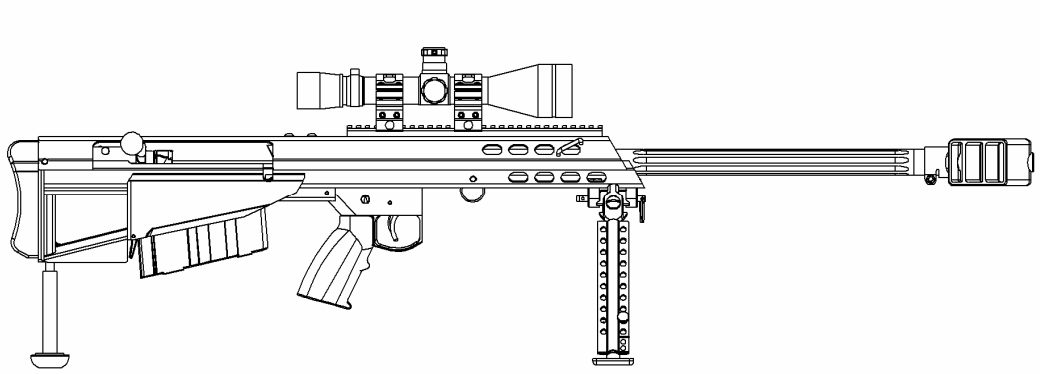
Model 95



Operator's Manual

November 28, 2006

USE OF THIS MANUAL

Before you handle the Model 95 rifle, read this manual in its entirety. It is important that you understand the principles of safe gun handling in general and the unique features of this rifle. This manual is not a substitute for training from a qualified instructor. Important safety topics are discussed in this chapter and throughout this manual. This manual should remain with the rifle and it should be transferred with the rifle to subsequent owners. It will be replaced at no cost by contacting the manufacturer.

This manual covers all variants of the Model 95. Technical specifications are subject to change without notice.

SAFETY GUIDELINES

WARNING
Failure to follow safety guidelines may cause injury or death.

Ammunition

Barrett does not condone the use of handloaded, remanufactured, or surplus ammunition. The use of clean, dry and properly stored commercially manufactured ammunition will preserve your warranty.

Safety distance

The .50 BMG cartridge is identical in construction to an ordinary centerfire rifle cartridge. Bullets fired from this rifle may travel as far as 5 miles. Make certain that you have an adequate backstop.

Hearing protection

Hearing loss is permanent. Hearing loss from gunfire is cumulative, but the noise from even one shot may cause permanent loss. Wear both ear plugs and ear muffs. It is also your responsibility to protect the hearing of those around you. The muzzle brake is integral to the design of your rifle and works to divert a large portion of a shot's blast rearward and to the side of the muzzle. Your rifle must not be fired without it. People and objects should not be in the vicinity of the muzzle brake because its blast consists of high pressure, high temperature gas. All spectators should use double hearing protection. The safest place for a spectator is directly behind the shooter.

Eye protection

Eye protection should be worn when both shooting and maintaining your rifle. It is normal for firing to generate airborne dust and debris. Glasses also protect you from scopes during recoil. Protect your eyes from solvents and uncaptured parts under spring pressure while performing maintenance on your rifle.

Assume every gun is loaded

Until you personally prove otherwise, treat every gun as if it were loaded. Do not trust your memory and do not take anyone else's word for it. Look and feel for an empty chamber. Do not trust the extractor to provide an empty chamber.

Beware of barrel obstructions

Ensure the barrel's bore is free of obstructions before you fire your rifle. Even the smallest obstruction such as a stuck patch or even grease will cause dangerously increased pressures that can rupture the barrel.

Use your muzzle brake

Your rifle was designed to be fired with the muzzle brake installed. Firing your rifle without the muzzle brake will subject your rifle and its accessories to damaging recoil. It could also cause the shooter to be injured.

Muzzle control

Always keep the muzzle pointed in a safe direction. Never allow your muzzle to point at anything that you do not intend to shoot.

Keep your finger off the trigger

Keep your finger off the trigger and out of the trigger guard until your sights are aligned on your target and you intend to fire.

Keep your safety on

Keep your safety on until your sights are aligned on your target and you intend to fire.

Identify your target and backstop

Before you pull the trigger, make certain of your target and what is beyond it. The rifle should never be fired at surfaces where bullets are likely to glance off in unpredictable directions.

Failure to fire

If your rifle fails to fire when you pull the trigger, do not lift the bolt handle to open the action. Keep the rifle pointed toward a safe area and wait 2 minutes. If a hangfire (slow ignition) has occurred, the round will probably fire within two minutes. If the round does not fire, remove and inspect the cartridge. If the primer is indented properly, discard it in a safe manner. If the primer is lightly dented, refer to the troubleshooting chart in this manual.

Maintain your rifle properly

Performing proper maintenance, as outlined in this manual, insures that your rifle will be safe to shoot and will perform to design specification for many years. Alterations, modifications or adjustments may damage your rifle, make it unsafe to fire and will void warranty claims.

Store your rifle safely

Even though your rifle represents a significant financial investment, the greatest value in keeping it secured is preventing it from falling into the hands of a child, a careless adult, or a thief. It is your responsibility to take every reasonable precaution to secure your rifle.

Alcohol, medications and drugs

Do not handle or operate your rifle under the influence of alcohol, medication or drugs.

WARRANTY AND SERVICE

Barrett Firearms Manufacturing Inc. (BFMI), warrants that this firearm was manufactured free of defects in materials and workmanship. For one year from the date of purchase by the original owner, BFMI agrees to correct any defect in this firearm for the original purchaser by repair or replacement with the same or comparable model.

BFMI will not be responsible for injury, death, or damage to property resulting from either intentional or accidental discharge of this firearm or from its function when used for purposes or subjected to treatment for which it was not designed. BFMI will not honor claims involving this firearm which result from careless or improper handling, unauthorized adjustment or parts replacement, corrosion, neglect, the use of the wrong caliber ammunition, or the use of other than commercially manufactured ammunition in good condition, or any combination thereof. BFMI will not honor claims involving this firearm when such claims are made by the second or subsequent owner.

If you need factory service, whether made under warranty or not, please contact BFMI for instructions on how to have your gun repaired.

Barrett Firearms Manufacturing Inc.
P.O. Box 1077
Murfreesboro, TN 37133-1077
615-896-2938

www.barrettrifles.com

Your Responsibility

Your Barrett rifle is well-engineered and manufactured to the highest standards. It was proof-fired and carefully inspected before it was packaged and shipped from our factory. Its safe use depends on you alone. You are the ultimate safety device. Much like other mechanical devices, such as electric power tools, gas-powered lawn equipment, and automobiles, your rifle is safe unless handled in an irresponsible or uneducated manner.

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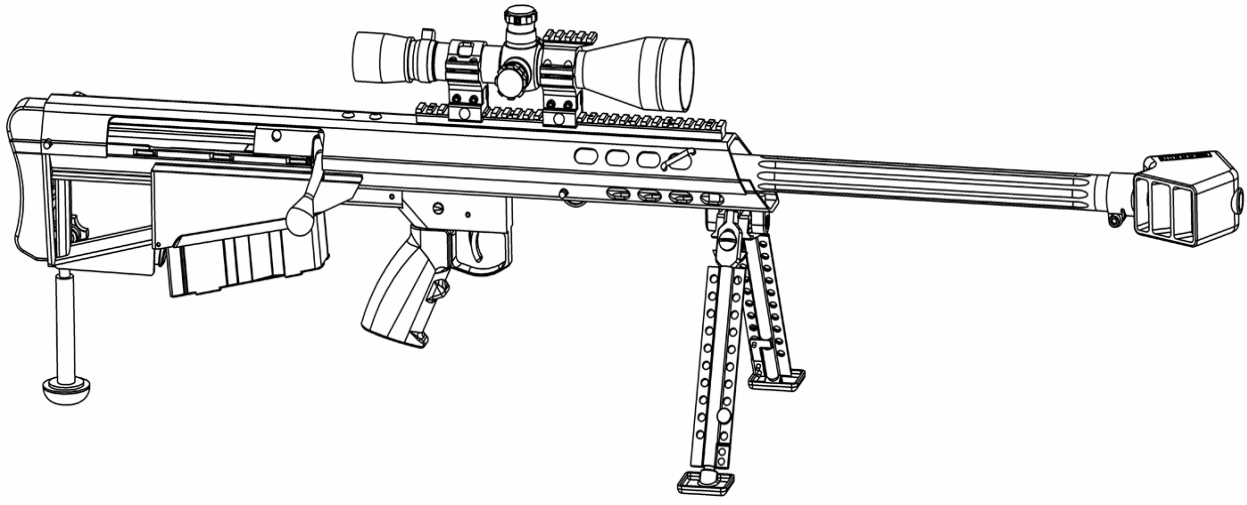
SPECIFICATIONS

BARRETT MODEL 95

CALIBER	.50 BMG
BARREL LENGTH	29 inches
OVERALL LENGTH	45 inches
WEIGHT	23.5 pounds
SCOPE AND RINGS WEIGHT	2.0 pounds (typical)
MAGAZINE WEIGHT	1.0 pounds
MAGAZINE WITH 5 CARTRIDGES	2.5 pounds
TWIST RATE	1 turn in 15 inches, right hand
SAFETY	Manual, thumb lever
SAFETY RANGE NEEDED	5 miles
SCOPE RAIL	Parallel with bore, M1913 style, 11.25 inches long
LENGTH OF CASE	53 inches
WIDTH OF CASE	16 inches
DEPTH OF CASE	6 inches
CASE WEIGHT	24 pounds



CONTENTS

Your Model 95 rifle system includes the following:

Rifle with bipod
Magazine
Watertight and airtight carrying case
Operator's manual

Your system may have also included telescopic sights, spare magazines, a rear monopod, a cleaning kit, lubricants, and preservatives.

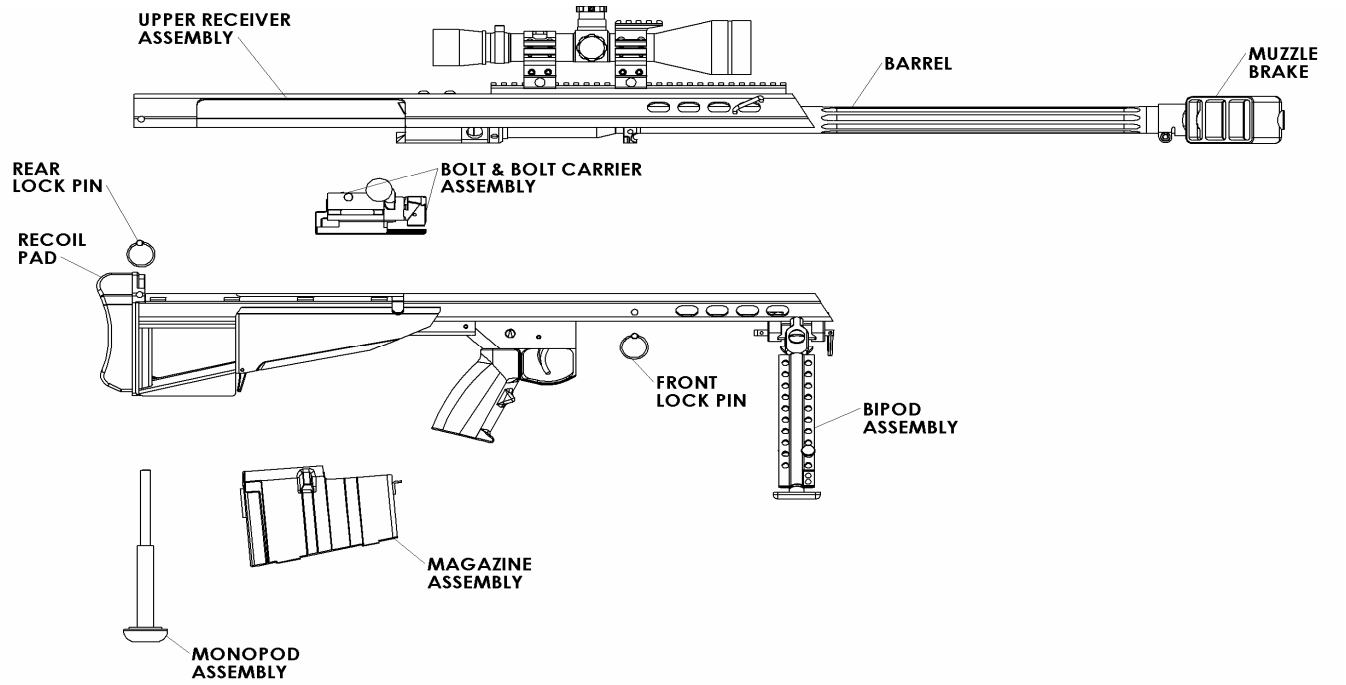
FUNCTION

The M95 rifle is a magazine-fed, bolt-action rifle. The shooter, having inserted a loaded magazine into the rifle, cycles the bolt which strips a cartridge from the top of the magazine and feeds it into the chamber. The firing pin assembly is cocked by lifting the bolt handle. The bolt is equipped with an extractor which removes a cartridge or shell casing. A manually controlled safety prevents or permits trigger movement.

BREAK-IN PROCEDURE

Because individual barrels, powder, primer and bullet combinations vary widely and because shooters have strongly held personal opinions on the subject, Barrett does not offer a specific procedure for barrel break-in. Barrett does recognize that a clean barrel shoots better. Barrett also recommends that you do not overheat your barrel, especially your new barrel. Experience has shown that the bore becomes less prone to fouling over time and that accuracy may increase as this occurs.

DESCRIPTION OF MAJOR COMPONENTS



Lock Pins: The lock pins connect the upper and lower receivers. One pin is located forward of the butt, the other in front of trigger group.

Upper Receiver Assembly: The upper receiver with its attached M1913 optics rail and the barrel assembly comprise the upper receiver assembly. The barrel has eight lands and grooves. The barrel's muzzle is threaded to accept the muzzle brake while the barrel extension is used for breech locking.

Lower Receiver: The lower receiver houses the trigger group and has rails on which the bolt carrier slides. The lower receiver also has a magazine well into which the 5-round magazine is inserted. The lower receiver also serves as the rifle's stock and has a soft recoil pad on its butt. The rifle will accept an adjustable monopod inserted forward of the recoil pad.

NOTE
Upper and Lower Receivers may not be interchangeable.

Monopod Assembly: The monopod assembly is used to support and adjust the rear of the rifle for elevation.

Bipod: The bipod consists of two legs and support feet. It adjusts for height, folds forward or backward when not in use, and can be removed.

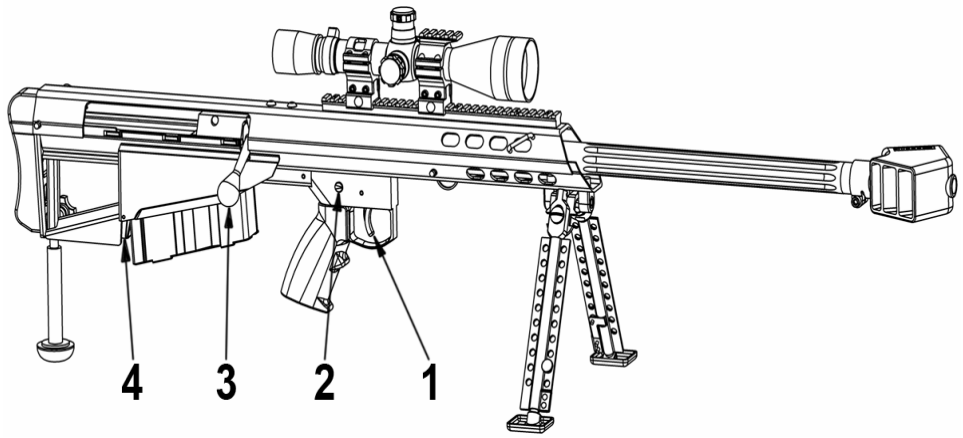
Bolt and Bolt Carrier: The bolt has locking lugs that mate with those in the barrel extension. The bolt contains the extractor and ejector. A bolt handle is used to lock and unlock the bolt, extract and eject cartridge cases and reload the rifle's chamber. The bolt carrier contains the bolt and slides on rails in the lower receiver. The bolt carrier also contains the firing pin, firing springs and cocking piece.

Magazine: The magazine is a box containing the magazine spring and follower and will hold up to 5 cartridges.

Muzzle Brake: The muzzle brake diverts and channels gas to reduce recoil.

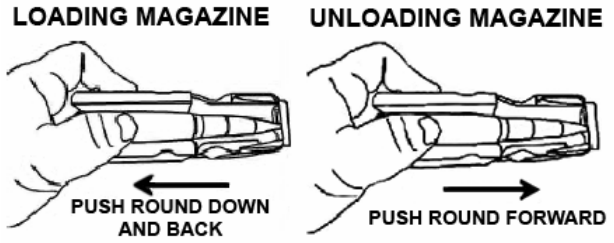
CONTROLS AND INDICATORS

Trigger (1): Fires the rifle by pulling rearward.
Safety Switch (2): Prevents or allows firing of the rifle.
Bolt Handle (3): Moving bolt handle locks and unlocks bolt. Also performs extraction and ejection of fired cartridge, and loading of new cartridge.
Magazine Catch (4): Retains magazine in the magazine well.



LOADING / UNLOADING MAGAZINE

To load magazine, center cartridge against feed lip in the magazine and press down until cartridge snaps under magazine lip. Continue loading cartridges in above manner until a maximum of five cartridges have been loaded. Make sure all 5 cartridges are pushed back to rear of magazine and there is no interference between magazine and projectiles' tips.



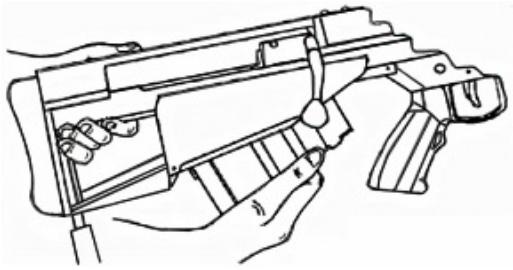
To unload magazine, hold magazine with one hand with the projectile tips facing away from you. Push each of the cartridges out of the magazine until all are ejected.

INSERTING MAGAZINE INTO RIFLE

Ensure safety selector switch is in "SAFE" position. Visually and physically inspect chamber to ensure it is clear of rounds or obstructions.

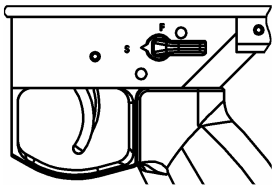
NOTE
The bolt may be forward or rearward during magazine insertion.

Tilt magazine so projectiles are angled upward and insert magazine into magazine well in lower receiver. Hook front of magazine in first, then rotate bottom rear of magazine upwards until you hear "click" as it locks into magazine catch.



CHAMBERING A CARTRIDGE

Ensure safety selector switch is in “SAFE” position and rifle’s muzzle is pointed in a safe direction down range. Lift bolt handle upward and pull all the way to rear. Next push bolt handle forward, chambering the top round from the magazine. Then lower bolt handle downward into locked position.



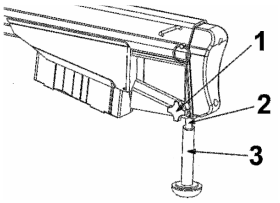
WARNING
Do not attempt to force a cartridge into the chamber by forcing the bolt closed. If the bolt will not close easily, remove the cartridge and examine it for damage or defects. Check the chamber for obstructions.

UNLOADING RIFLE

Place the safety selector switch in “SAFE” position. Press magazine catch and remove magazine by pivoting it down and out. Lift bolt handle upward and pull all the way to rear to extract and eject any cartridge or fired case that may be chambered. Visually or physically check chamber to ensure there is no round chambered. Leave bolt handle in open position so it is obvious the rifle is unloaded and safe.

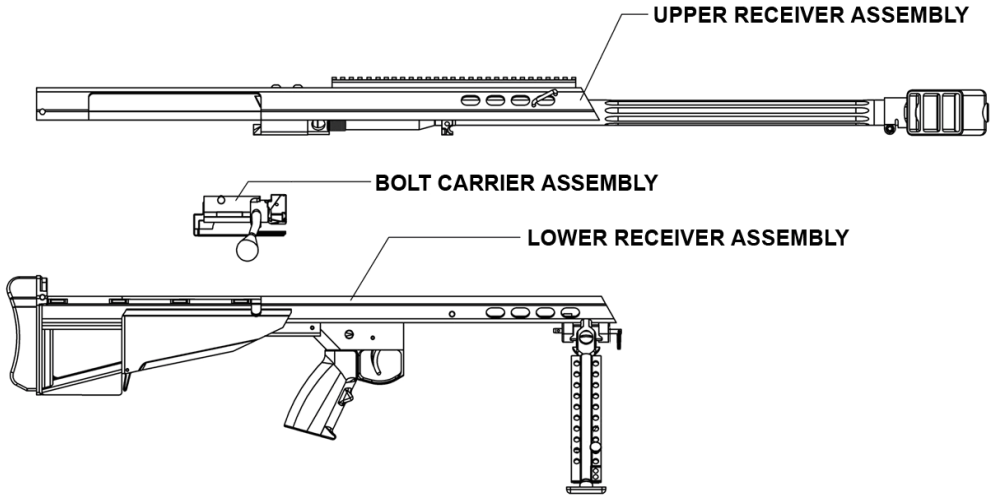
ADJUSTING THE MONOPOD SYSTEM

Use the lock knob (1) to adjust desired height of monopod screw (2). Once in firing position, twist elevation collar (3) for fine adjustment.

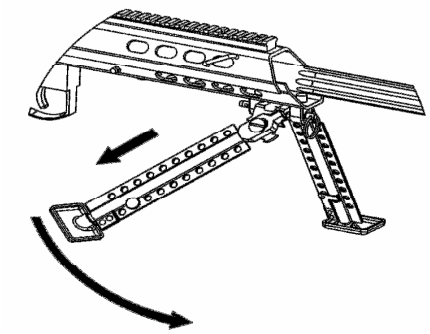


DISASSEMBLY

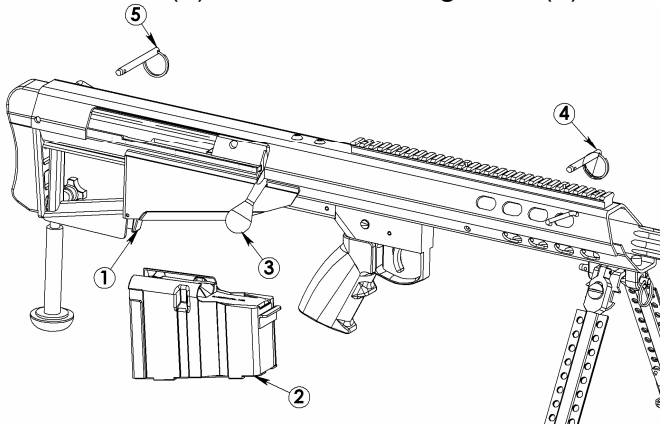
The Model 95 is disassembled into 3 major components: the upper receiver assembly, the lower receiver assembly and the bolt carrier assembly.



After deploying bipod legs to upright position, let rifle rest on its butt so that it is freestanding.

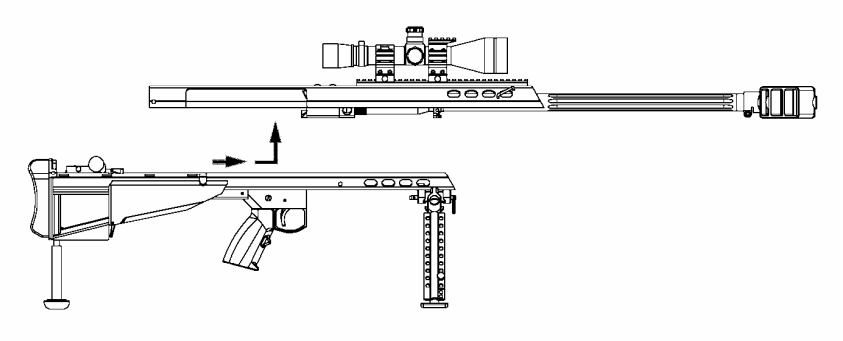


Depress the magazine catch (1) and remove magazine (2) from the rifle.



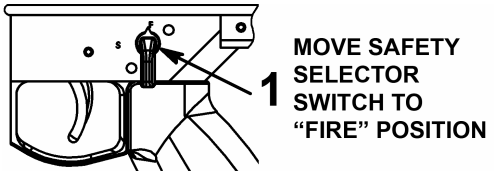
Unlock the bolt (3) by lifting the bolt handle upward and pulling it to the rear. Withdraw the mid lock pin (4) and rear lock pin (5) from the receiver.

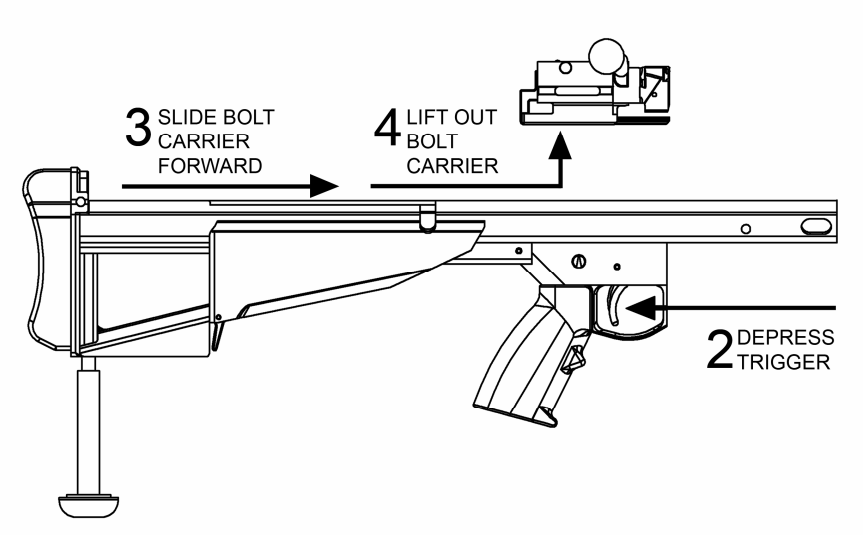
Grasp the upper receiver and barrel. Slide them forward about ½ inch (13mm). Then lift the upper receiver assembly off lower receiver assembly.



Note
No further disassembly of the upper receiver is necessary.

To remove the bolt carrier from lower receiver assembly, place the safety switch on “FIRE”, pull the trigger, then slide bolt carrier forward and lift it off the rails.

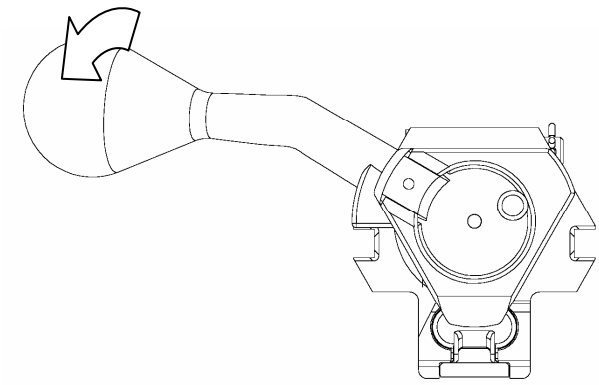




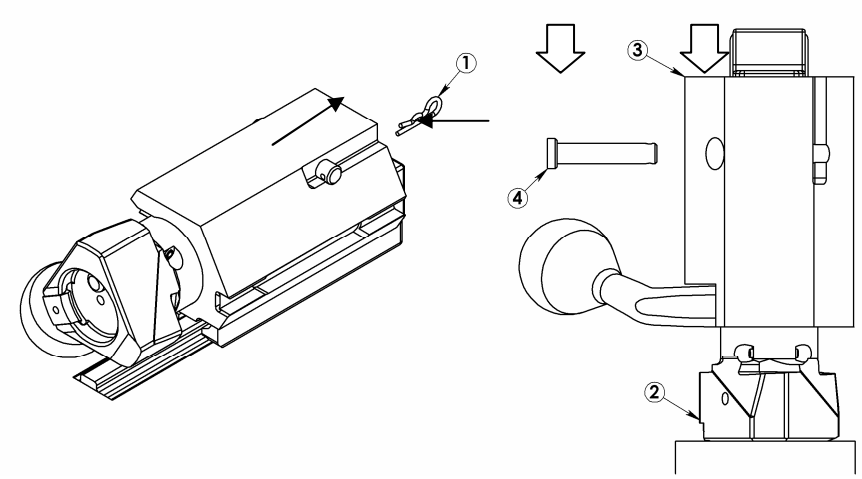
Reassembly is the reverse of disassembly.

BOLT CARRIER

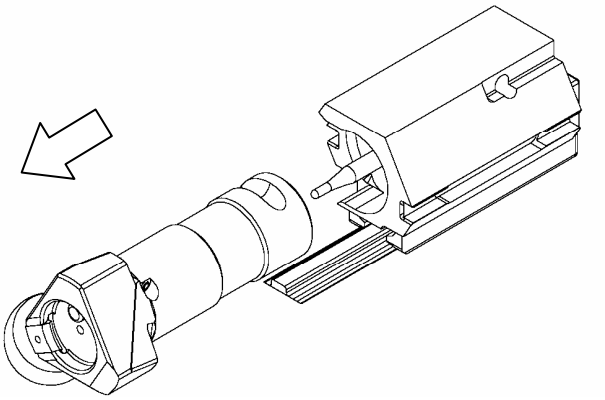
De-cock action by lowering the bolt handle.



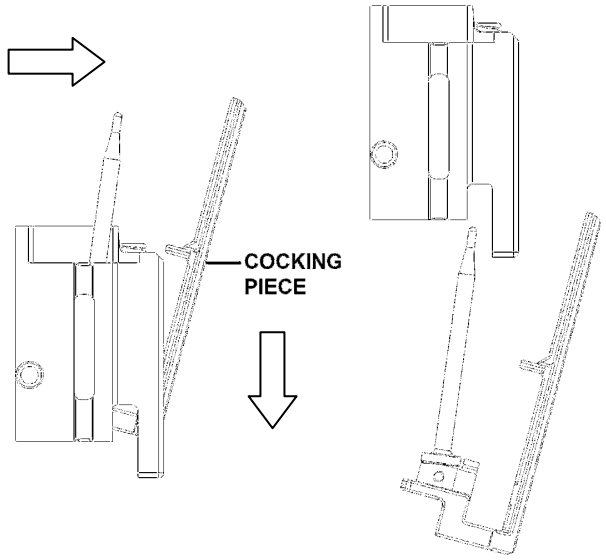
Remove the hair pin (1). While compressing the bolt (2) into bolt carrier (3), remove the bolt pin (4).



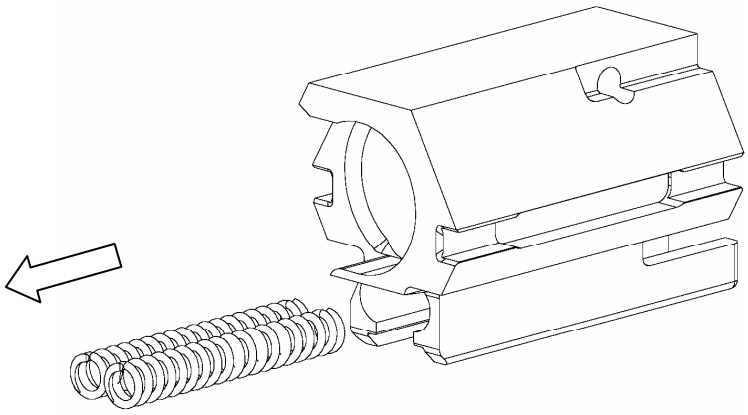
Now remove the bolt from the bolt carrier assembly.



Pivot the cocking piece so that spring retainer clears the bolt carrier, then remove it from the rear of the bolt carrier.



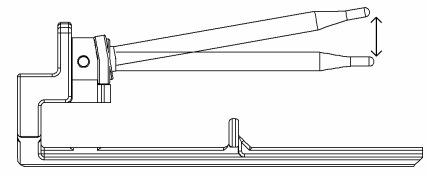
Remove the two firing springs.



No further disassembly of bolt carrier assembly is necessary.

Reassembly of the bolt carrier is reverse of disassembly.

Note
Removal of the firing pin from the cocking piece isn't necessary as long the firing pin is freely pivoting on its retaining pin. Ensure the firing pin can move freely about ¾ inch (20mm).

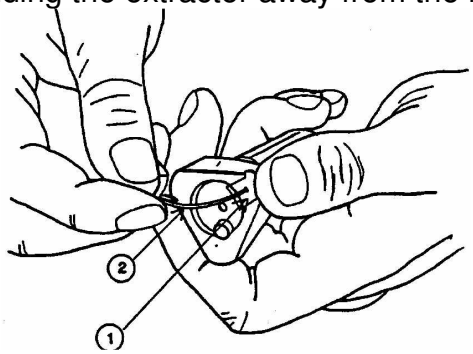


EXTRACTOR REMOVAL

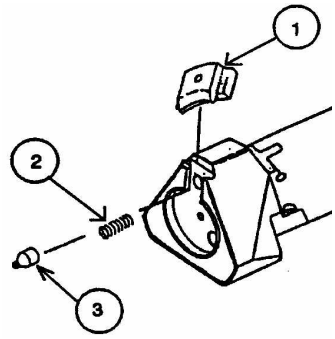
WARNING
The extractor is under spring pressure and is held in place by the ejector pin. Wear safety glasses when removing the ejector pin.

Note
Removal of the extractor is not recommended unless it is broken or does not move freely back and forth.

To remove the extractor (1), depress the extractor plunger by inserting a 1/16 inch (1.5 mm) pin punch or the end of a paper clip (2) through the extractor hole while simultaneously sliding the extractor away from the firing pin hole.



Slide the extractor (1) out of its slot. The extractor spring (2), and extractor plunger (3) can then be removed, but be careful to contain the spring and plunger.



Installation of the extractor is reverse of removal.

CLEANING AND LUBRICATION

WARNING
Unload and clear the rifle before cleaning.

CAUTION
Do not insert cleaning rods through the muzzle. The barrel crown could be damaged which would severely degrade the accuracy of the rifle.

Cleaning procedure

1. The rifle should be cleaned and lubricated after each shooting session. Regular cleaning prevents the corrosive effects of moisture.

2. Apply cleaning solvent to a chamber brush and clean the chamber. Barrett Heavy Bore Cleaner is recommended.

3. Apply cleaning solvent to a bore brush and clean the bore. Barrett Heavy Bore Cleaner is recommended.

4. Clean the muzzle brake with a stiff plastic brush and bore solvent. It is best to clean the muzzle brake at the same time the barrel is being cleaned as the bore solvent will help loosen the carbon build-up on its interior walls.

5. Clean the bolt face with bore solvent. Use a stiff plastic brush to remove carbon from both the extractor and the ejector. Depress the ejector and extractor by hand to test their smooth function.

6. Use dry patches as necessary to remove cleaner from the bore and chamber.

7. Clean the remainder of the rifle with cotton-tipped swabs, general-purpose brushes and rags. Make sure all metal surfaces are coated with preservative oil.

Corrosive ammunition cleaning procedure

CAUTION
Barrett does not recommend shooting corrosive ammunition. Shooting corrosive ammunition may damage your firearm. Damage due to firing corrosive ammunition is easy to detect and is not covered under the warranty agreement.

CAUTION
Rust will begin to form on bare metal resulting from the hot water rinse unless rust preventative or light oil is applied immediately.

If you have been forced by necessity or have accidentally fired corrosive ammunition, the following specialized cleaning procedure applies.

1. Cleaning. Immediately after firing the corrosive ammunition, thoroughly scrub the bore and bolt face with very hot soapy water or cleaner specifically designed for corrosive ammunition.

2. Rinsing and drying. When the metal is clean, rinse the surfaces with very hot water. Wipe off excess moisture. The residual heat in the metal will evaporate most water droplets.

3. Protecting. Either continue cleaning the rifle using procedures specified for non-corrosive ammunition, or if temporary transportation or storage is necessary, immediately coat all surfaces with rust preventative.

Operating under unusual conditions

Unusual conditions are defined as any condition requiring special maintenance. Perform maintenance outlined for the climate similar to your operational area.

Extreme Cold: When operating rifle in extremely cold temperatures, clean and lubricate the rifle at room temperature if possible. Apply a light coat of lubricant to all functional parts. To prevent freezing, keep rifle covered when moving from a warm to a cold area. This will allow gradual cooling. Keep rifle dry. Keep ammunition dry as frozen moisture can cause malfunctions. Do not lubricate ammunition. Always keep bore free of snow. If snow gets into bore, clean the bore before firing using a swab and cleaning rod.

Dust or Sand: Dust and sand can get into rifle and cause malfunctions and excessive wear. Keep rifle covered when possible. Use lubricant sparingly.

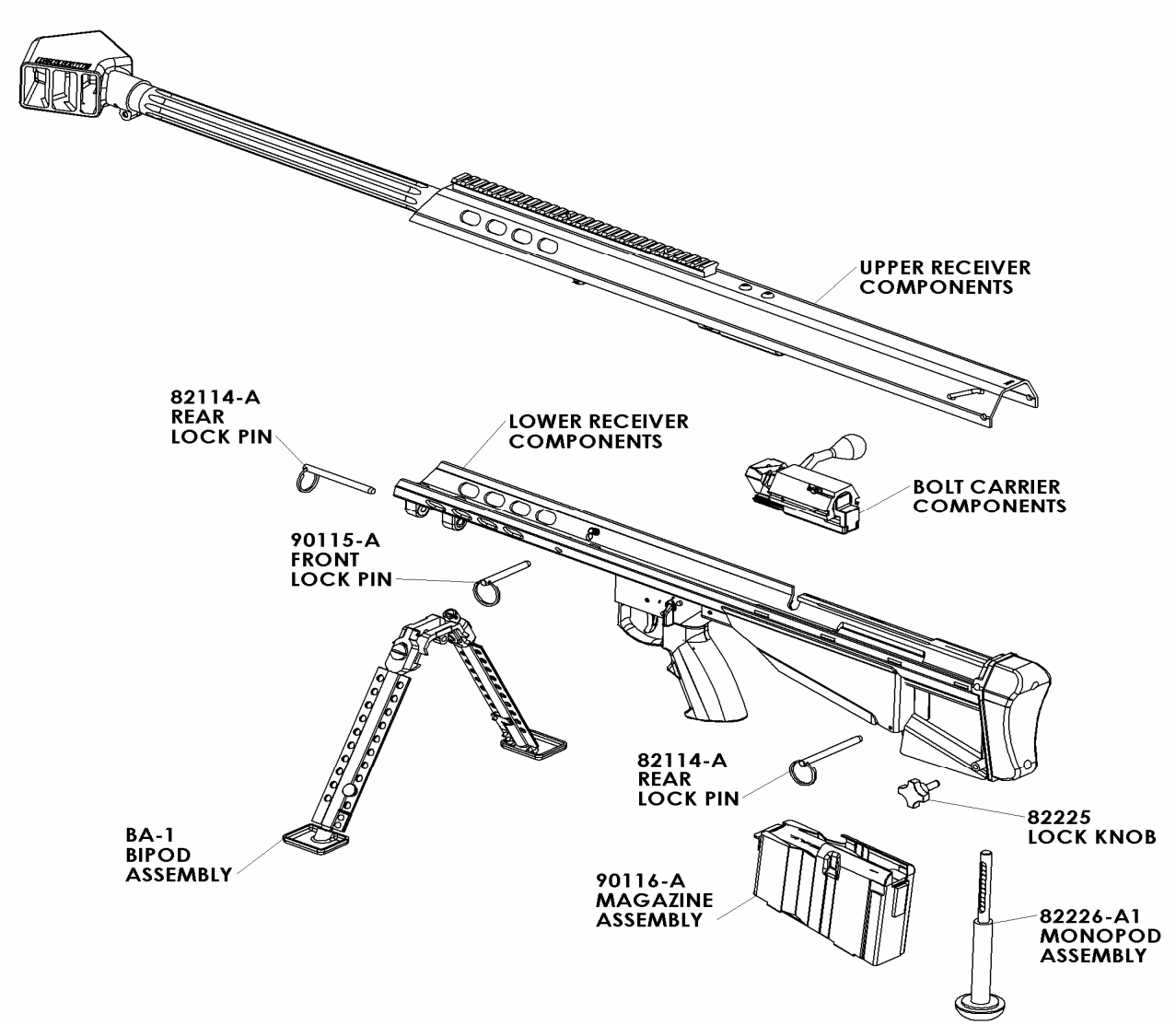
Heavy Rain and Fording Operations: Perform maintenance in accordance with normal cleaning procedures and apply thin coat of lubricant. Do not lubricate ammunition. Always drain any water from barrel prior to firing. Dry the bore with swab and cleaning rod.

Hot, Wet Climate: Perform maintenance more frequently. Inspect hidden surfaces for corrosion. Clean and lubricate if corrosion is found. To prevent external corrosion, remove handprints with oily cloth. Dry completely then lubricate rifle. Never store rifle in a wet carrying case.

TROUBLESHOOTING

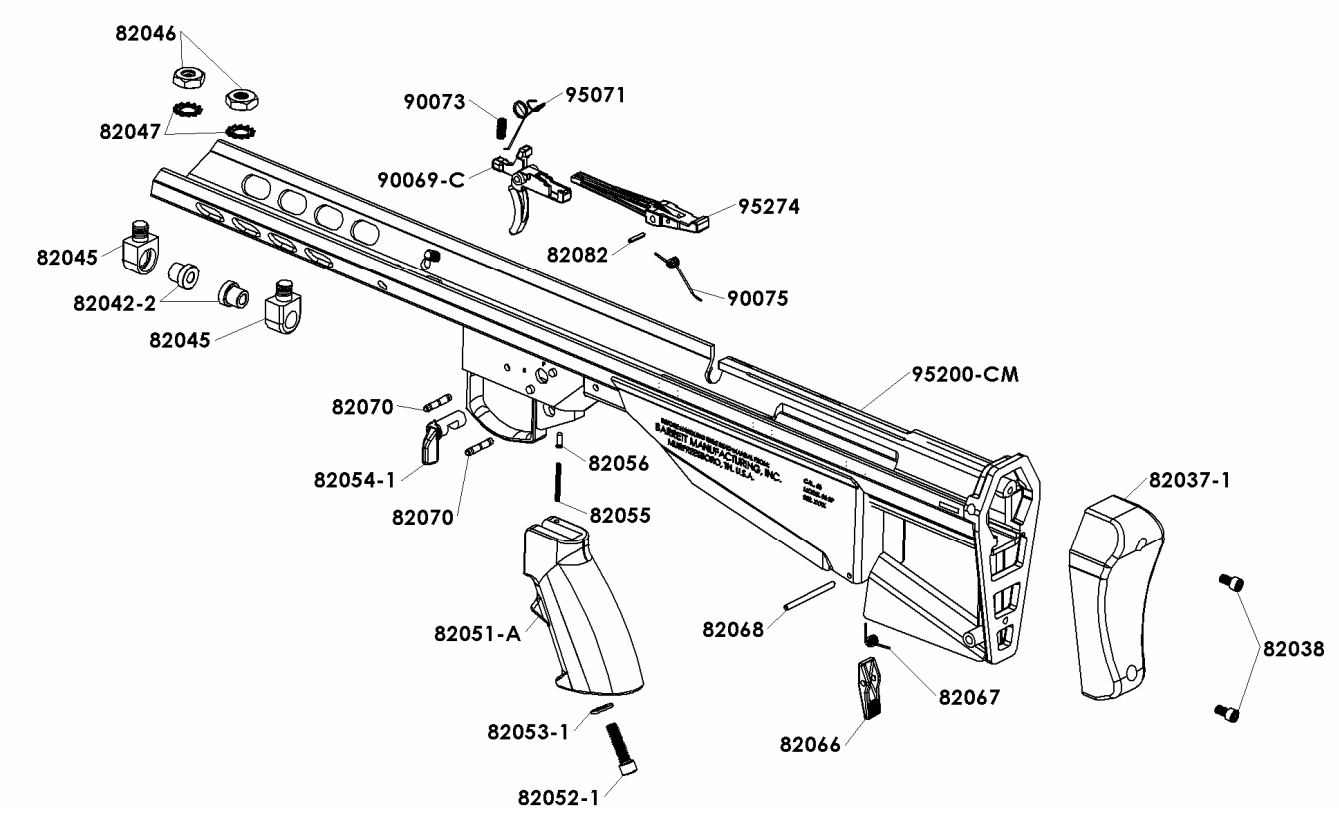
MALFUNCTION	CAUSE	CORRECTIVE ACTION
1. Failure to feed	1. Did not draw bolt carrier fully to rear	1. Retract bolt carrier fully to the rear
	2. Magazine not seated	2. Seat magazine properly
2. Failure to chamber	1. Damaged cartridge	1. Remove and replace cartridge
	2. Dirty or obstructed chamber	2. Clean chamber
3. Failure to lock or unlock	1. Obstruction between firing pin and bolt	1. Disassemble and clear obstruction
4. Failure to fire	1. Faulty ammunition. Primers dented in center of sufficient depth to fire.	1. Replace ammunition
	2. Cocking piece shroud not properly installed in bolt	2. Assemble properly
	3. Cocking piece is dragging	3. Clean and lubricate cocking piece
	4. Firing pin or firing pin spring broken or damaged	4. Return complete bolt assembly for repair
	5. Bolt handle not full down	5. Push bolt handle fully down
3. Failure to extract	1. Broken or worn extractor	1. Replace extractor
	2. Broken or worn extractor spring	2. Replace extractor spring
	3. Extractor not moving freely	3. Clean extractor, extractor spring, and recess
	4. Dirty ammunition or chamber	4. Clean chamber and ensure ammunition is clean
	5. Broken case rim	5. Clear with cleaning rod
4. Failure to eject	1. Broken or worn ejector	1. Replace ejector
	2. Broken or worn ejector spring	2. Replace ejector spring
	3. Ejector not moving freely	3. Clean ejector, ejector spring and recess
5. Very hard recoil	1. Faulty or hot ammunition	1. Replace ammunition, cool if hot
	2. Muzzle brake missing	2. Consult with Barrett for instructions
	3. Improper shooter position	3. Firmly shoulder the buttstock

MAJOR SUBASSEMBLIES



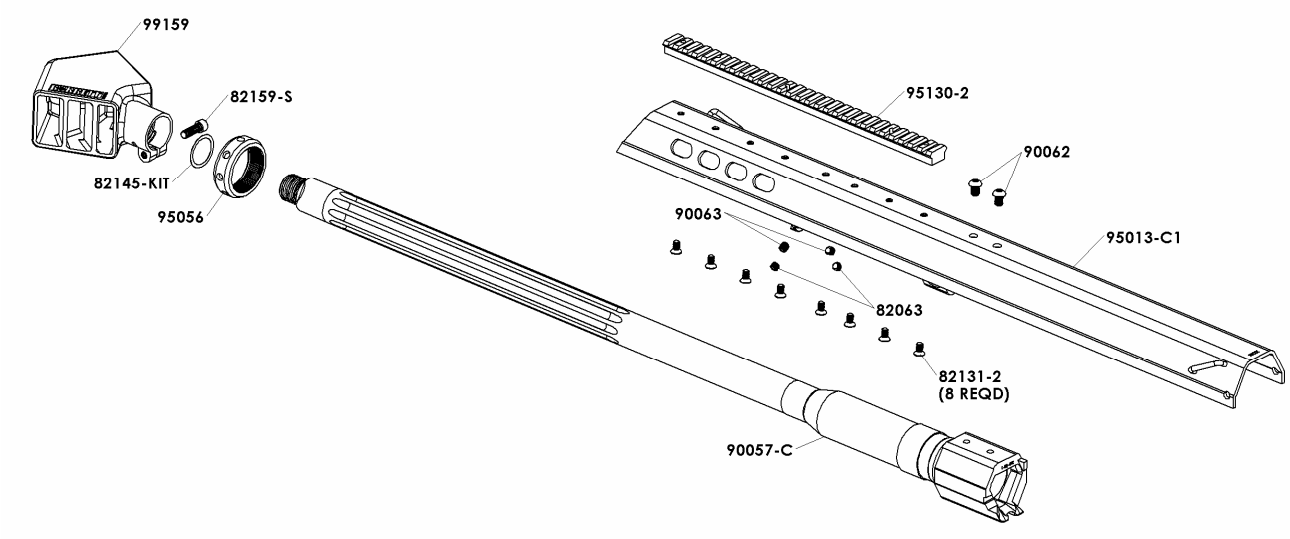
PART NO.	DESCRIPTION	QYT
N/A	UPPER RECEIVER COMPONENTS	1
N/A	LOWER RECEIVER COMPONENTS	1
N/A	BOLT CARRIER COMPONENTS	1
82114-A	REAR LOCK PIN	2
82225	LOCK KNOB	1
82226-A1	MONOPOD ASSEMBLY	1
90115-A	FRONT LOCK PIN	1
90116-A	MAGAZINE ASSEMBLY	1
BA-1	BIPOD ASSEMBLY	1

LOWER RECEIVER COMPONENTS



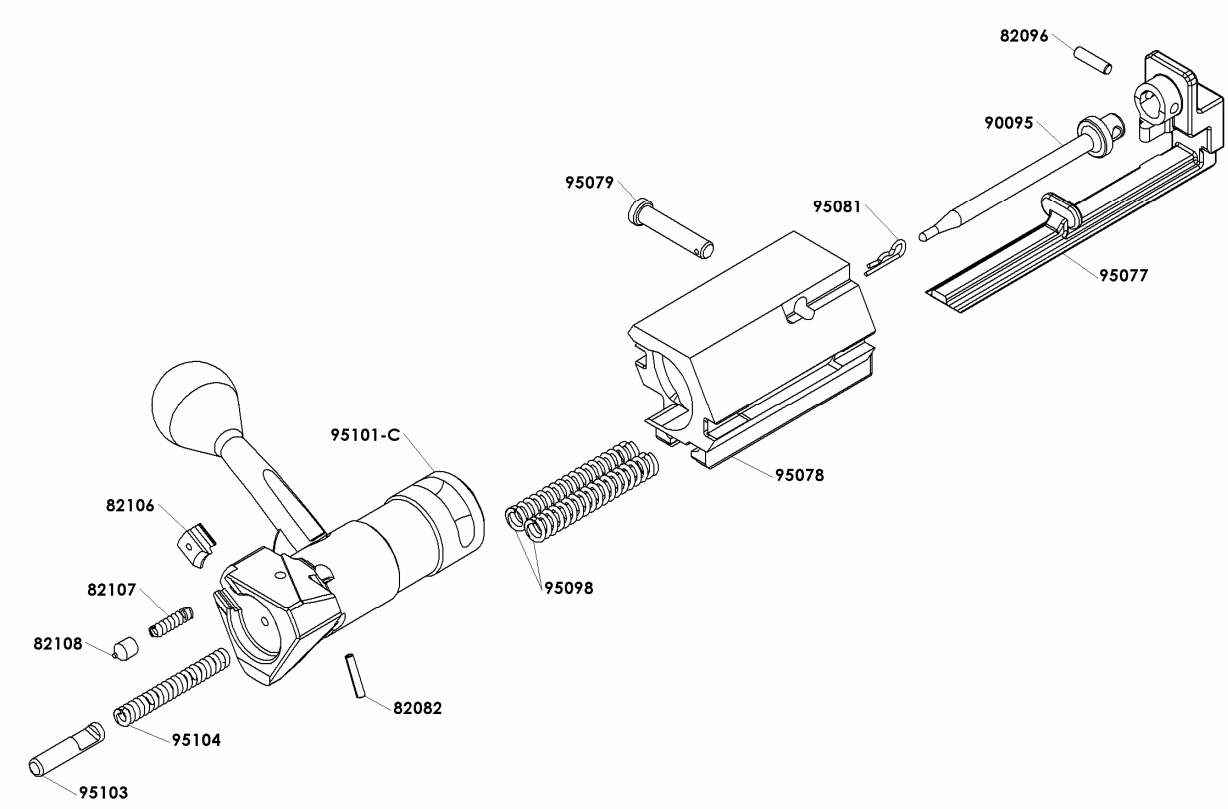
PART NO.	DESCRIPTION	QTY.
82037-1	RECOIL PAD	1
82038	RECOIL PAD SCREW	2
82042-2	BIPOD SHIM BUSHING	2
82045	YOKE MOUNT	2
82046	YOKE MOUNT NUT	2
82047	YOKE MOUNT WASHER	2
82051-A	PISTOL GRIP	1
82052-1	PISTOL GRIP SCREW	1
82053-1	PISTOL GRIP WASHER	1
82054-1	SAFETY	1
82055	SAFETY SPRING	1
82056	SAFETY DETENT	1
82066	MAGAZINE CATCH	1
82067	MAGAZINE CATCH SPRING	1
68068	MAGAZINE CATCH PIN	1
82070	TRIGGER PIN	2
82082	SEAR PIN	1
90069-C	TRIGGER COMPLETE	1
90073	TRIGGER OVERTRAVEL SCREW	1
90075	SEAR SPRING	1
95071	TRIGGER SPRING	1
95200-CM	LOWER RECEIVER COMPLETE	1
95274	SEAR	1

UPPER RECEIVER COMPONENTS



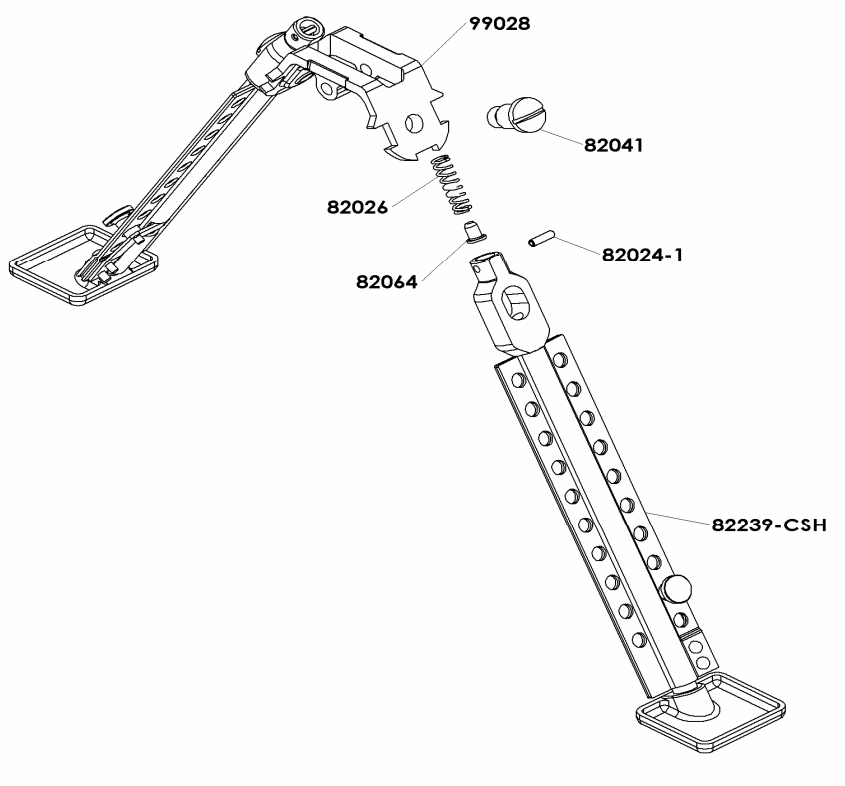
PART NO.	DESCRIPTION	QTY.
82063	BARREL SPRING SCREW	2
82131-2	SCOPE BASE SCREW	8
82145-KIT	MUZZLE BRAKE SHIM KIT	AS NEEDED
82159-S	MUZZLE BRAKE SCREW	1
90057-C	BARREL COMPLETE	1
90062	BARREL EXTENSION SCREW	2
90063	BARREL SCREW	2
95013-C1	UPPER RECEIVER COMPLETE	1
95056	BARREL NUT	1
95130-2	SCOPE BASE/1913 MOUNTING RAIL	1
99159	MUZZLE BRAKE	1

BOLT CARRIER COMPONENTS



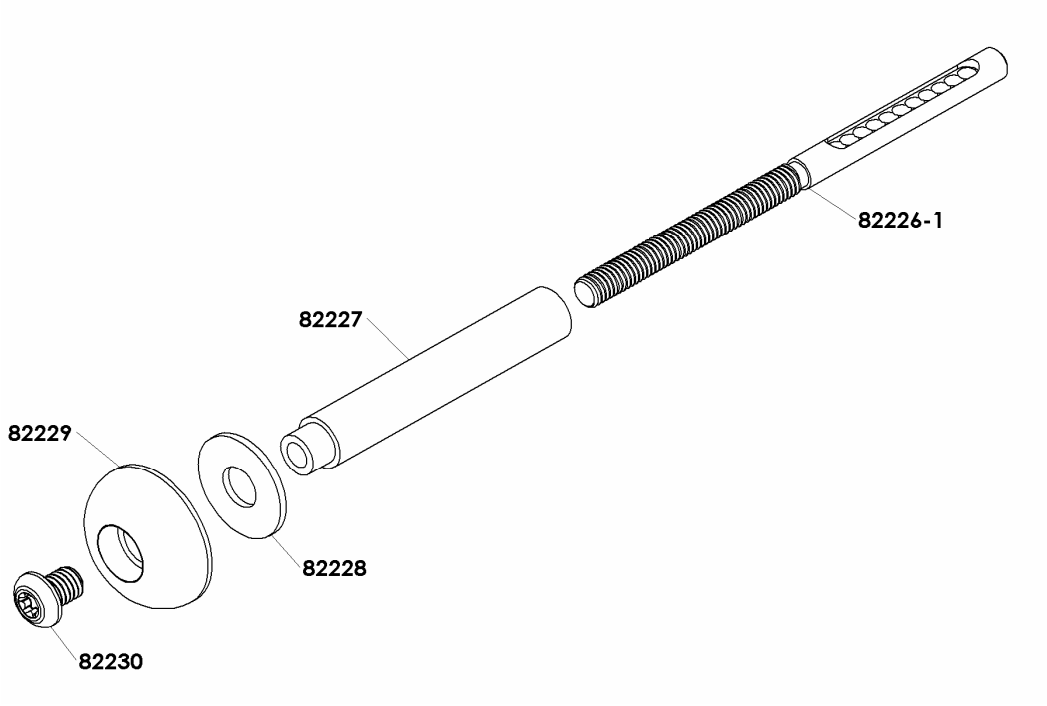
PART NO.	DESCRIPTION	QTY.
82082	EJECTOR PIN	1
82096	FIRING PIN PIN	1
82106	EXTRACTOR	1
82107	EXTRACTOR SPRING	1
82108	EXTRACTOR PLUNGER	1
90095	FIRING PIN	1
95077	COCKING PIECE	1
95078	BOLT CARRIER	1
95079	BOLT CARRIER PIN	1
95081	BOLT CARRIER HAIR PIN	1
95098	FIRING SPRING	2
95101-C	BOLT COMPLETE	1
95103	EJECTOR	1
95104	EJECTOR SPRING	1

BA-1 BIPOD ASSEMBLY



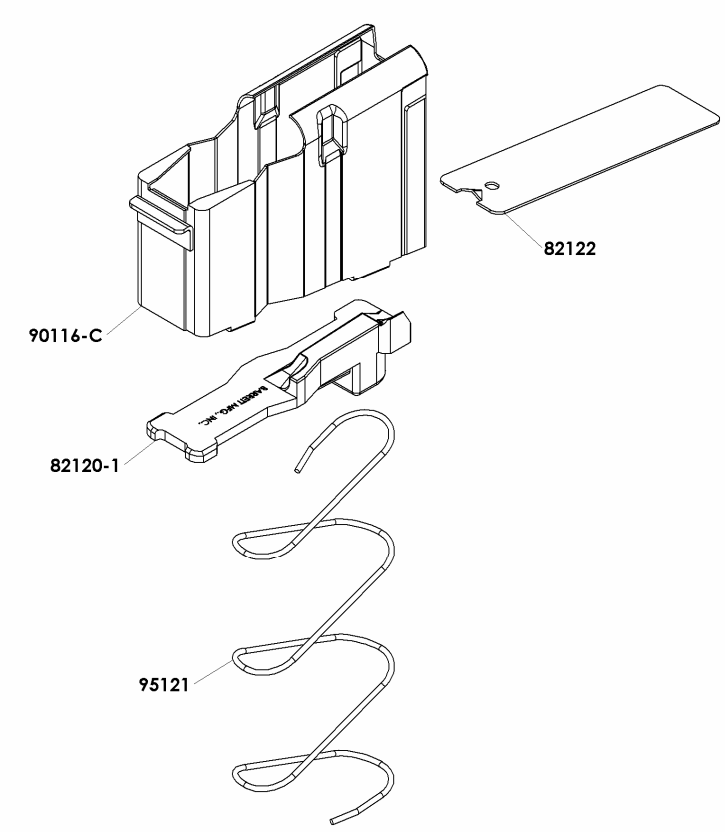
PART NO.	DESCRIPTION	QTY.
82024-1	BIPOD PIN	2
82026	BIPOD SPRING	2
82041	BIPOD SCREW	2
82064	BIPOD DETENT	2
82239-CSH	BIPOD LEG COMPLETE	2
99028	BIPOD YOKE	1

82226-A1 MONOPOD ASSEMBLY



PART NO.	DESCRIPTION	QTY.
82226-1	ELEVATION SCREW	1
82227	ELEVATION COLLAR	1
82228	MONOPOD FOOT WASHER	1
82229	MONOPOD FOOT	1
82230	MONOPOD FOOT SCREW	1

PART NUMBER 90116-A MAGAZINE ASSEMBLY



PART NO.	DESCRIPTION	QTY.
82120-1	MAGAZINE FOLLOWER	1
82122	MAGAZINE FLOORPLATE	1
90116-C	MAGAZINE COMPLETE	1
95121	MAGAZINE SPRING	1

.50 BMG BALLISTIC DATA (For Law Enforcement and Military Use Only)

RANGE METERS	M33 BALL, M8 API ELEVATION MOA	M-20 APIT ELEVATION MOA	MK211 ELEVATION MOA
100	**0.00**	**0.00**	**0.00**
200	2.50	2.75	2.50
300	5.00	5.25	5.25
400	7.75	8.00	8.25
500	11.00	11.00	11.50
600	14.50	14.25	15.25
700	18.25	17.75	19.00
800	22.50	21.75	23.25
900	27.00	26.00	28.25
1000	31.75	30.75	34.50
1100	37.50	36.00	40.50
1200	43.75	41.75	47.00
1300	50.50	49.00	55.50
1400	58.50	56.00	65.25
1500	67.75	65.25	76.25
1600	76.25	74.75	87.00
1700	87.25	84.00	98.00
1800	98.25	94.50	108.75
1900	110.00	105.75	120.00
2000	122.75	117.25	132.00

100	-11.00	-11.00	-11.50
200	-8.50	-8.25	-9.00
300	-6.00	-5.75	-6.25
400	-3.25	-3.00	-3.25
500	**0.00**	**0.00**	**0.00**
600	3.50	3.25	3.75
700	7.25	6.75	7.50
800	11.50	10.75	11.75
900	16.00	15.00	16.75
1000	20.75	19.75	23.00
1100	26.50	25.00	29.00
1200	32.75	30.75	35.50
1300	39.50	38.00	44.00
1400	47.25	45.00	53.75
1500	56.50	54.25	64.75
1600	65.00	63.75	75.50
1700	76.00	73.00	86.50
1800	87.00	83.50	97.25
1900	98.75	94.75	108.50
2000	111.50	106.25	120.50

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